

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties, said steel sheet containing, in mass,

C: 0.0050% or less,  
Si: 0.50% or less,  
Mn: 0.005 to 1.0%,  
P:  $10 \times (B - 11/14 \times N)$  to 0.10%,  
S: 0.080% or less,  
Al: 0.050% or less,  
N: 0.0005 to 0.020%,  
B:  $0.60 \times N$  to 0.020%,  
O: 0.002 to 0.0800%, and

and the balance being Fe and unavoidable impurities, and the steel sheet further containing simple or compound nitrides having a diameter of 0.02 to 0.50  $\mu\text{m}$  which contain B or Al, and having the average diameter of 0.080  $\mu\text{m}$  or larger, and the proportion of the number of the nitrides of 0.050  $\mu\text{m}$  or smaller in diameter to the total number of said nitrides being 10% or less.

2. (Previously Presented) A steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties, said steel sheet containing, in mass,

C: 0.0025% or less,  
Si: 0.050% or less,  
Mn: 0.10 to 0.50%,  
P:  $10 \times (B - 11/14 \times N)$  to 0.030%,  
S: 0.030% or less,  
Al: 0.010% or less,  
N: 0.0035 to 0.0060%,  
B:  $0.60 \times N$  to 0.0060%,

O: 0.005 to 0.0450%, and  
and the balance being Fe and unavoidable impurities, and the  
steel sheet further containing simple or compound nitrides  
having a diameter of 0.02 to 0.50  $\mu\text{m}$  which contain B or Al,  
and having the average diameter of 0.080  $\mu\text{m}$  or larger, and the  
proportion of the number of the nitrides of 0.050  $\mu\text{m}$  or  
smaller in diameter to the total number of said nitrides being  
10% or less.

3. (Previously Presented) A steel sheet for vitreous  
enameling excellent in workability, aging properties and  
enameling properties, said steel sheet containing, in mass,

C: 0.0025% or less,  
Si: 0.050% or less,  
Mn: 0.10 to 0.50%,  
P:  $10 \times (B - 11/14 \times N)$  to 0.030%,  
S: 0.030% or less,  
Al: 0.010% or less,  
N: 0.0005 to 0.0033%,  
B: 0.60xN to 0.90xN%,  
O: 0.005 to 0.0450%, and

and the balance being Fe and unavoidable impurities, and the  
steel sheet further containing simple or compound nitrides  
having a diameter of 0.02 to 0.50  $\mu\text{m}$  which contain B or Al,  
and having the average diameter of 0.080  $\mu\text{m}$  or larger, and the  
proportion of the number of the nitrides of 0.050  $\mu\text{m}$  or  
smaller in diameter to the total number of said nitrides being  
10% or less.

4. (Previously Presented) A steel sheet for vitreous  
enameling excellent in workability, aging properties and  
enameling properties according to any one of claims 1 to 3,  
wherein the steel sheet further containing one or more of Nb,  
V, Ti, Ni, Cr, Se, As, Ta, W, Mo and Sn at 0.030 mass % or  
less in total.

5. (Presently Presented) A steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties according to any one of claims 1-3, said steel sheet satisfying the following expression:

(the amount of N existing as BN)/(the amount of N existing as AlN)  $\geq$  10.0.

6. (Currently Amended) A steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties according to any one of claims 1 to 3, said steel sheet satisfying the following expression:

(the amount of N existing as BN)/(~~the amount of N~~ content existing as AlN)  $\geq$  0.50.

7. (Currently Amended) A method for producing a steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties ~~and enameling properties~~ characterized by:

retaining a slab containing the components according to any one of claims 1-3 in the temperature range from 900 to 1,100°C (Retained Temperature Range 1) for 300 minutes or longer before commencing hot rolling;

thereafter retaining it in a temperature range not less than 50°C higher than said retained temperature (Retained Temperature 2) for 10 to 30 minutes;

then cooling it to a temperature range not less than 50°C lower than said retained temperature (Retained Temperature 3) at a cooling rate of 2°C/sec. or less;

retaining it in said retained Temperature 3 for 10 minutes or longer; and thereafter commencing hot rolling.

8. (Previously Presented) A method for producing a steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties and enameling properties according to claim 7, wherein hot-rolling is controlled under the condition of the time period from the

time when the coiling of a hot-rolled steel sheet terminates at a temperature of 700 to 750°C in a hot-rolling process to the time when the temperature of said steel sheet reaches 550°C or lower for 20 minutes or longer.

9. (Previously Presented) A method for producing a steel sheet for vitreous enameling excellent in workability, aging properties and enameling properties and enameling properties according to claim 7, wherein the hot-rolled steel sheet is retained in the temperature range from 900 to 1,200°C for 2 minutes or longer with the temperature of said steel sheet not lowered to 900°C or lower when the reduction ratio reaches 50% or more after commencing hot-rolling, and thereafter hot-rolling is commenced again.